

Figure 2-1: Cable Cross-Section (360networks, inc. 2000a)

Cable Installation

Before the cable is installed, a grapnel drag would be performed along the cable route to determine the presence of any unknown (abandoned) cables or any fishing gear or other debris. The depth of the prongs on the grapnel is approximately 40 centimeters (cm). The width of the grapnel spear (the portion that penetrates the sea bed) is 6 inches (in) across. Any obstacles encountered would be severed after appropriate confirmation is made that the cable, rope, wire, or other obstruction has been abandoned. The grapnel drag would be performed along the approved cable route only. A database of known cables in the world (including known abandoned cables) will be used to identify all existing cables along the route. That database is maintained to identify cables along a prospective cable route and is updated regularly with information from parties involved in the submarine cable industry. The route survey also is able to detect cables along the route.

Two 6-inch steel conduits would be installed beneath the nearshore areas of Nahant Bay to the 5 m water depth. Hibernia initially would occupy one of those conduits, and the second conduit would accommodate a future, as yet unidentified, project. The directional drill from shore would allow the cable to be installed within the conduit from the landing site to the 5 m water depth without disturbance to the sea bed. In offshore areas, the cable would be buried approximately 1.5 m beneath the ocean bottom from the end of the conduit to the 1,500 m depth level, which occurs at the continental shelf in international waters. Cable installation in depths of more than 1,500 m would be accomplished by laying the cable unburied along the ocean bottom.